

ARRAY SEARCHING OPERATIONSABSTRACT

5           In one embodiment, a programmable processor searches  
an array of N data elements in response to N/M machine  
instructions, where the processor has a pipeline configured  
to process M data elements in parallel. In response to the  
machine instructions, a control unit directs the pipeline  
10       to retrieve M data elements from the array of elements in a  
single fetch cycle, concurrently compare the data elements  
to M current extreme values, and update the current extreme  
values, as well as M references to the current extreme  
values, based on the comparisons.